

POWER DISCRETES

Description

Quick reference data

$$V_R = 800 - 1000V$$

$$I_F = 3.0A$$

$$t_{rr} = 75nS$$

$$I_R = 2\mu A$$

Features

- ◆ Very low reverse recovery time
- ◆ Glass passivated for hermetic sealing
- ◆ Low switching losses
- ◆ Soft, non-snap off, recovery characteristics
- ◆ Avalanche capability

Absolute Maximum Ratings

Electrical specifications @ $T_A = 25^\circ C$ unless otherwise specified.

	Symbol	2PFF8	2PFF0	Units
Working Reverse Voltage	V_{RWM}	800	1000	V
Average Forward Current @ $55^\circ C$, lead length 0.375"	$I_{F(AV)}$	3.0		A
Repetitive Surge Current @ $55^\circ C$ in free air, lead length 0.375"	I_{FRM}	9.0		A
Non-Repetitive Surge Current ($t_p = 8.3mS$ @ V_R & T_{JMAX})	I_{FSM}	45.0		A
Storage Temperature Range	T_{STG}	-55 to +175		$^\circ C$

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Electrical Specifications

	Symbol	2PFF8	2PFF0	Units
Average Forward Current max (pcb mounted; $T_A = 55^\circ\text{C}$)	$I_{F(AV)}$	1.0		A
Average Forward Current max ($T_L = 55^\circ\text{C}$; $L = 3/8"$)	$I_{F(AV)}$	3.0		A
I^2t for fusing ($t = 8.3\text{mS}$) max	I^2t	8.4		A^2S
Forward Voltage Drop max. @ $I_F = 3.0\text{A}$, $T_j = 25^\circ\text{C}$	V_F	1.7		V
Reverse Current max. @ V_{RWM} , $T_j = 25^\circ\text{C}$ @ V_{RWM} , $T_j = 100^\circ\text{C}$	I_R I_R	2 50		μA
Reverse Recovery Time max. $0.5\text{A } I_F$ to $1.0\text{A } I_{RM}$ recovers to $0.25\text{A } I_{RM(REC)}$	t_{rr}	75		nS
Junction Capacitance typ. @ $V_R = 5\text{V}$, $f = 1\text{MHz}$	C_j	40		pF

Thermal Characteristics

	Symbol	2PFF8, 2PFF0	Units
Thermal Resistance-Junction to Lead Lead length = $0.375"$	$R_{\theta JL}$	26	$^\circ\text{C/W}$

Typical Characteristics

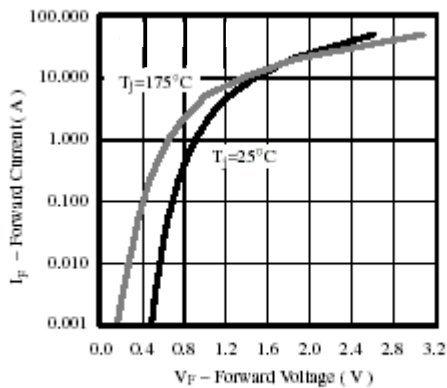


Figure 1. Max. Forward Current vs. Forward Voltage

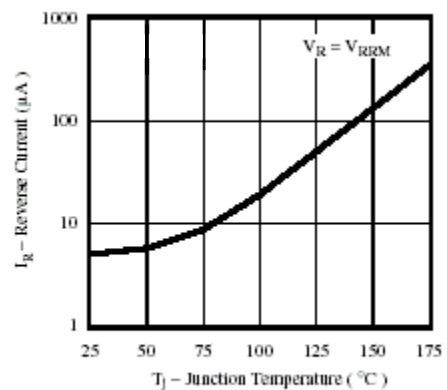


Figure 2. Max. Reverse Current vs. Junction Temperature

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Typical Characteristics (Cont.)

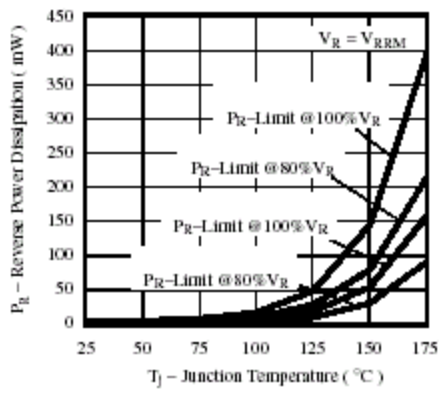


Figure 3. Max. Reverse Power Dissipation vs. Junction Temperature

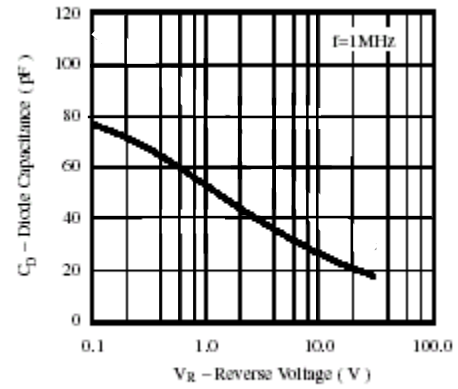


Figure 4. Diode Capacitance vs. Reverse Voltage

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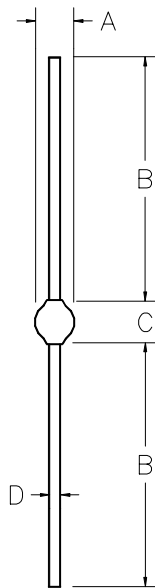
Ordering Information

Part Number	Description
2PFF8 2PFF0	Axial leaded hermetically sealed ⁽¹⁾

Note:

(1) Available in bulk and tape and reel packaging. Please consult factory for quantities.

Outline Drawing



Dimensions					
DIM ^N	Inches		Millimeters		Note
	MIN	MAX	MIN	MAX	
A	-	.177	-	4.50	-
B	1.02	-	26	-	-
C	-	.197	-	5.00	-
D	-	.053	-	1.35	-

Weight = 0.035oz

Contact Information

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